

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-024666**Date Inspected:** 05-Jun-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. An Qing Xiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG Trial Assembly open yard.

Segment:13AW

The following Non Destructive Testing (NDT) Inspection was carried out as per the ZPMC submitted Notification No.09367.

Ultrasonic Testing (UT)

This QA performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated a UT report for this date. The members are identified as OBG weld Components. Total number of welds UT tested: (10).The weld designations inspected were as follows:

1. SEG3013AA-042,044,046,048,050,053,057,059,061
2. SEG3013AA-055.

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During Quality Assurance UT review of welds located on OBG at panel point 119+1500 cross beam side, this QA observed that One Class “A” indication measuring approximately 10 mm in length. The Indication rating is +3dB. The depth of the indication is approximately 18.5 mm. The weld joint is identified as SEG3013AA-055. The weld is a Complete Joint Penetration (CJP) with reinforcement fillet weld, T joint joining floor beam (FB3193A) to “T” stiffener plate (RS3417D). The thickness of the stiffener plate is 22 mm. The “Y” location is approximately 80 mm from the south end of the weld termination as shown on picture below. The indication is clearly marked on or near the weld. Segment 13AW is currently located in the OBG Trial assembly area.

The Notice of Witness Inspection Number (NWIT) is 09367. The indication is located within an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, The contractors personnel are required to perform 100% UT inspection of this weld.

This QA generated an Incident Report for the above issue on this date, for further information see the Incident Report and attached photos.

Segment: 13CW

This QA Inspector randomly observed the following work in progress:

Shielded Metal Arc Welding (SMAW) welding of weld joint identified as SEG3015D-279. Welder is identified as 068596. ZPMC QC is identified as Mr. Shi lei. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-P-2214-TC-U4b-FCM-1.

SMAW welding of weld joint identified as SEG3015F-256. Welder is identified as 045196. ZPMC QC is identified as Mr. Shi lei. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-P-2214-TC-U4b-FCM-1.

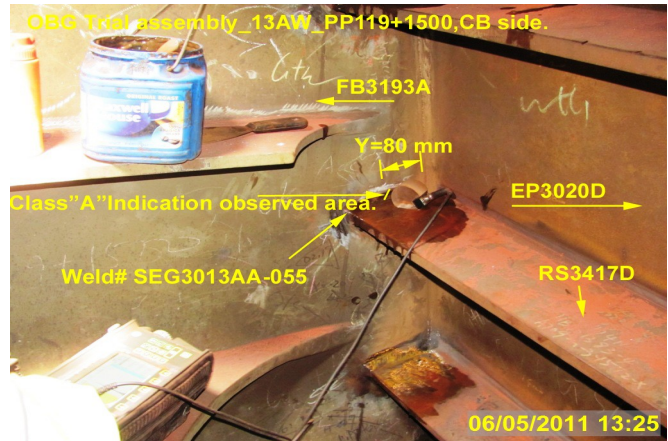
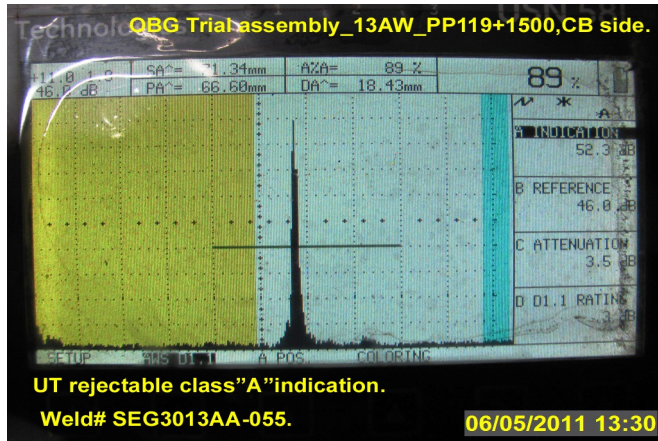
SMAW welding of weld joint identified as SEG3015U-002. Welder is identified as 066156. ZPMC QC is identified as Mr. Shi lei. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-P-2214-TC-U4b-FCM-1.

Flux Cored Arc Welding (FCAW) welding of weld joint identified as SEG3015H-353. Welder is identified as 045240. ZPMC QC is identified as Mr. Shi lei. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS- B-T-2231-ESAB.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Prabhu,Surendra

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer